



RE: Univar USA Inc. NPDES Permit Renewal - Proposal to Refine RPA Brian O'Neal

to:

WIREN Mer

02/02/2010 10:58 AM

Cc:

Holly Arrigoni, Rene Fuentes, "geist.gregory@deq.state.or.us", George Sylvester, Daniel Balbiani

Hide Details

From: Brian O'Neal <boneal@pesenv.com> Sort List...

To: WIREN Mer <WIREN.Mer@deq.state.or.us>

Cc: Holly Arrigoni/R10/USEPA/US@EPA, Rene Fuentes/R10/USEPA/US@EPA, "geist.gregory@deq.state.or.us" <geist.gregory@deq.state.or.us>, George Sylvester <George.Sylvester@univarusa.com>, Daniel Balbiani <dbalbiani@pesenv.com>



1 Attachment



S81600101L_1164.pdf

Sorry about that – here is the attachment

From: Brian O'Neal

Sent: Tuesday, February 02, 2010 10:56 AM

To: 'WIREN Mer'

Cc: 'Arrigoni.Holly@epamail.epa.gov'; Fuentes.Rene@epamail.epa.gov; 'geist.gregory@deq.state.or.us'; 'George

Sylvester'; Daniel Balbiani

Subject: Univar USA Inc. NPDES Permit Renewal - Proposal to Refine RPA

Mer,

USEPA RCRA
3022031

Please find attached a copy of a letter that went out hard copy in the mail yesterday regarding Univar's proposal to refine the Reasonable Potential Analysis for their Portland facility's NPDES permit renewal. Consistent with our discussions over the last month or so, Univar has proposed collecting additional effluent data for iron and also reevaluate the mixing zone modeling and allocation. We will be taking our second effluent sample

tomorrow.

If you have any questions regarding Univar's proposal, please feel to contact me.

Brian O'Neal, P.E.

PES Environmental, Inc. 1215 4th Avenue, Suite 1350 Seattle, Washington 98161

ph: (206) 529-3980 cell: (425) 241-2627



February 1, 2010

816.001.01(128)

Ms. Mer Wiren, P.E.
Oregon Department of Environmental Quality
Northwest Regional Water Quality
2020 SW Fourth Avenue, Ste. 400
Portland, Oregon 97201

Re: Proposal to Refine Reasonable Potential Analysis

Renewal of Permit No. 101613 Univar USA, Inc., Portland, Oregon

Dear Ms Wiren:

On behalf of Univar USA, Inc. (Univar), PES Environmental, Inc. (PES) has prepared this proposal to gather additional information required to refine the Reasonable Potential Analysis (RPA) being conducted as part of the renewal process for Univar National Pollutant Discharge Elimination System (NPDES) Permit No. 101613. The proposal would take up to 7 months to implement, primarily due to the time required to collect the necessary effluent samples. During this time, Univar requests that the Department of Environmental Quality (DEQ) continue to administratively extend Univar's current permit to allow for the continued operation of, and discharge from, the groundwater treatment system that is a critical component of the corrective action being implemented by Univar at their Portland facility.

BACKGROUND

This proposal to refine the RPA is based on information you presented during our meeting on January 12, 2010 and in follow up communications. This information indicated that the preliminary RPA you conducted, based on the data Univar provided in its permit reapplication package, concluded that there may be a "reasonable potential" for iron to exceed the applicable water quality criteria at the edge of the approved mixing zone and therefore iron effluent limits would be required in the new permit. As we have discussed, the inclusion of an iron effluent limit at the preliminary concentrations you provided would likely require a significant expansion of the groundwater treatment system. Before Univar commits to such an expansion, Univar is proposing to address several issues (described below) that would result in a more representative and defensible RPA.

The first issue Univar would like to address is the data set used to conduct the RPA for iron. It appears that the results of this preliminary RPA were significantly influenced by the statistical evaluation of the data provided in the reapplication. Specifically, because the RPA was based on the results of a single iron effluent sample, the statistical handling of that one data point resulted in an extremely high "calculated maximum effluent concentration" which in turn resulted in a very high concentration calculated for the edge of the mixing zone.

Univar does not believe this calculated maximum concentration is representative of the discharge and significantly overestimates the potential impact of the discharge on the receiving water.

The second component of the RPA that Univar would like to refine is the establishment of the regulatory mixing zone (RMZ) for the permit. The current permit established a 10 meter RMZ, which in conjunction with the numeric modeling of the mixing of the effluent discharge to the river, was utilized to determine the allowable dilution that was subsequently used in the RPA. In reviewing the available information from the previous permit renewal that was used to support the establishment of the 10 meter mixing zone, it is not entirely clear what the basis was for the 10-meter boundary.

PROPOSED SCOPE OF WORK

To address the two issues related to the current preliminary RPA described above, Univar propose to conduct the following activities.

Collect additional effluent data. DEQ's RPA Internal Management Directive¹ (IMD) requires a minimum of 12 effluent data points be used to evaluate the RPA for metals. To meet this requirement, Univar proposes to collect a total of 12 effluent samples and analyze the samples for dissolved iron using EPA Method 200.7 on a bi-monthly (twice per month) schedule. The first effluent sample to be analyzed for dissolved iron was collected on January 22, 2010 and additional samples would be collected approximately every two weeks through June 2010. At the conclusion of this sampling effort, DEQ will have a statistically valid set of data with which the revised RPA can be conducted.

Review/Revise Mixing Zone Modeling. Univar would like the opportunity to review in detail DEQ's effluent mixing zone modeling that was used to support the RPA. We understand that DEQ used the CORMIX model in their analysis. Univar proposes to retain an expert in mixing zone modeling to review the CORMIX model, including the underlying assumptions and input data. Based on that review, Univar may propose alternative assumptions and/or input data (along with the supporting rationale) and rerun the mixing zone model. The revised modeling, if conducted, would be done using either CORMIX or another DEQ-approved model and be conducted consistent with the requirements of Part 2 of the RMZ IMD². At this time, Univar anticipates using available information regarding the outfall (i.e., Outfall #18) and the adjacent receiving waters in this analysis.

Reevaluate Basis for RMZ. After completion of the review and possible revision of the mixing zone model, Univar will review the allocation of the RMZ consistent with the requirements of OAR 340-042-0053 and the guidelines presented in Part 1 of the RMZ IMD³. Based on this review, Univar may propose an alternative mixing zone. If an alternative

¹ Reasonable Potential Analysis for Toxic Pollutants Internal Management Directive. Oregon Department of Environmental Quality. September 2005.

² Regulatory Mixing Zone Internal Management Directive. Part 2: Reviewing Mixing Zone Studies. Oregon Department of Environmental Quality. December 2007.

³ Regulatory Mixing Zone Internal Management Directive. Part 1: Allocating Regulatory Mixing Zones. Oregon Department of Environmental Quality. December 2007.

Mer Wiren, P.E. February 1, 2010 Page 3 of 3

mixing zone is proposed, Univar will provide DEQ with the supporting documentation and rationale.

SCHEDULE

As noted above, the scope of work proposed above would take approximately 7 months to complete which is primarily a function of the time required to collect and analyze the required number of effluent samples. Univar would conduct the mixing zone model evaluation and reevaluation of the RMZ concurrent with the sample collection effort. Univar will have all of the information generated by the proposed scope of work, including any recommendations for changes in the either the RPA or RMZ, to DEQ no later than August 1, 2010.

Thank you for your assistance with the permit renewal and your consideration of this proposal. Univar looks forward to getting these matters resolved in a scientifically defensible manner as quickly as possible. As noted above, Univar has begun to collect the required effluent samples. If you concur with the scope of work and schedule outlined above, Univar will continue with the sampling efforts and begin conducting the mixing zone/RMZ allocation evaluation. If you have any questions, feel free to contact me at (206) 529-3980.

Very truly yours,

PES ENVIRONMENTAL, INC.

Brian O'Neal, P.E. Associate Engineer

cc:

George Sylvester, Univar USA, Inc. Holly Arrigoni, U.S. EPA Region 10